

SF 521

A5

v.13-14

## INDEX TO CORRESPONDENTS.

—:O:—

**A.**—W. J. Andrews 22, 49, 88, 163, 187, 224, 225, 260, 267, 310, 333, 369, 407, H. Alley 51, 64, 87, 119, 201, 238, 266, 271, 304, 305, 308, 349, 415, 421, J. Anderson 51, R. M. Argo 65, 199, 272, 307, 343, N. P. Allen 69, 88, 195, 209, 410, J. L. Anderson, 126, 276, 336, H. J. Alvis 160, A. C. Attwood 235, R. Arnold 261, J. Atkinson 276, L. C. Axte11 335, R. M. Anderson 335, W. H. Andrews 341, A. Beginner 418, M. Adams 419.

**B.**—H. Bird 15, R. S. Beckett 30, S. S. Butler 30, 51, H. A. Burch 31, 56, 95, 120, 185, 276, 340, J. M. Bennett 48, M. M. Baldrige 49, 121, 130, Dr. J. P. H. Brown 50, 136, J. W. Bittenbender 51, W. S. Boyd, 54, F. Benton 57, 133, 140, 177, 225, 277, 238, 405, T. F. Bingham 62, 85, 123, 206, 220, 235, W. S. Barclay 91, J. Billings 88, W. Bence 102, Barker & Dicer 122, R. Bacon 135, 301, O. Brumfield 156, O. M. Brown 156, Jos Brown 158, 161, J. Barfoot 159, C. S. B. 161, Mrs. A. Brackett 161, L. C. Borman 162, W. J. Beal 173, A. Benedict 190, 239, Mrs. L. B. Baker 194, Mrs. M. A. Bills 197, P. Bossert 204, D. Bartgis 207, J. M. Brooks 219, 259, J. Best 230, W. G. Bailey 240, R. E. Bush 278, J. D. Bedell 297, O. F. Bledsoe 305, H. L. Brush 351, N. N. Betsinger 382, Dr. Botts 411, E. E. Billings 414, W. B. Burgett 419, A. A. Baldwin 420, E. B. Barker 422, H. B. 422.

**C.**—W. F. Clark 11, 13, 46, W. Christ 16, A. Chapman 16, A. J. Cook 18, 67, 92, 96, 101, 165, 189, 221, 278, 300, 315, 371, N. Cameron 20, 163, 240, J. J. Caldwell 28, 268, W. H. Conklin 47, R. C. Cameron 51, D. Clifton 51, J. T. Connelley 32, 126, C. R. Clough 53, 242, J. M. Camp 53, J. S. Coe 57, 101, 158, 310, P. P. Collier 67, 68, 101, 322, 347, O. Clute 97, 227, 304, M. M. Callen 102, J. H. Christie 121, F. P. Clark 123, R. L. Curry 125, F. W. Chapman 155, 201, S. Cornell 155, Crowfoot Bros. 159, E. Culver 162, W. Cam 162, 241, 314, A. B. Cheney 165, 173, 324, C. E. Clark 202, O. E. Clark 207, F. Claussen 240, John Crowfoot 276, J. Z. Carr 278, W. E. Connett 301, A. U. Crosby 315, G. W. Church 333, R. A. Calvin 350, O. Courtney 350, E. Cori 406, I. M. Camp 420.

**D.**—G. M. Doelittle 14, 347, 364, 370, 417, 422, J. L. Davis 14, 63, 64, F. R. Davis 15, M. D. DuBois 16, Dr. Dzierzon 23, 223, C. Dadant 24, 25, 27, 84, 96, 106, 157, 164, 206, 231, 233, 269, 305, 308, 350, 409, P. Dunken 51, 207, J. Divekey 52, Mrs. J. W. Dick 53, L. J. Diehl 120, 134, J. Davis 134, R. Dart 159, J. W. Dodson 159, S. C. Dodge 178, 333, 375, 408, D. M. D. 242, A. J. Davidson 288, W. Dyer 275, 277, Mrs. J. S. Dunham 301, J. A. Dirwanger 301, W. J. Davis 332, M. Deunler 314, Mrs. M. Dunbar 334, N. B. DeVol 336, J. B. Dines 422.

**E.**—J. Emmons 51, 162, 204, 240, J. Edmonds 101, W. P. Evritt 102, 135, 161, 421, P. H. Elwood 160, H. D. Edwards 265, 351, E. S. Edwards 240.

**F.**—C. Follett 48, R. Forsyth 51, J. B. Ficklen 52, J. F. Flory 52, 156, 275, 301, B. Franklin 102, 209, C. J. Fox 157, 264, S. S. Fetherolf 335, J. Fox 416.

**G.**—C. Grimm 19, 418, W. H. Garhan 51, F. M. Glasgow 53, 422, J. W. Guthrie 53, C. F. Greening 13, 240, 278, 300, J. G. 83, J. W. Greene 100, 240, 267, G. L. Gast 100, A. P. Green 123, LeRoy Gates 123, R. P. G. 158, D. Grabble 162, J. M. Good 189, C. Griebeling 205, C. E. Gaylord 207, J. R. Gossage 221, J. M. Gills 241, J. E. Greene 242, W. H. Green 251, C. A. Ging 279, J. L. Grey 279, K. Grayson 286, C. J. H. Gravenhorst 300, 336, 348, M. G. Grigsby 315, C. A. Graves 355, J. M. Glenn 341, P. H. Gibbs 413, J. T. Gray 420.

**H.**—J. E. Hetherington 14, 377, J. Huestis 14, O. Halbleib 15, 52, 420, A. J. Haney 16, J. Hazen 17, J. Heddon 26, 54, 94, 140, 194, 199, 232, 288, 305, 358, 417, S. Humfield 47, 162, Mrs. W. Harris 51, J. Harmon 53, 157, 300, H. Hamilton 68, 345, D. E. Haynie 83, 301, J. P. Howard 84, J. F. Hershey 100, H. S. Harrison 100, 101, C. M. Halbleib 101, H. G. Hendricks 102, A. H. Hart 120, 206, H. Haines 122, 162, 176, 196, 202, 208, 271, 274, 304, 313, 314, 419, E. Hershey 126, N. H. Holman 126, 301, D. P. Hartford 155, W. P. Hogarty 156, H. S. Henth 160, J. Harper 162, W. W. Hippolite 162, 207, L. Hitchcock 165, W. P. Henderson 197, 230, 243, J. E. Hunter 204, J. W. Howell 205, E. J. Hill 205, A. S. Haskin 206, Mrs. D. M. Hall 208, H. H. Howard 220, J. T. Hobbs 234, J. H. Hodgkins 240, H. 276, J. M. Hicks 277, H. Harnard 279, G. T. Horning 302, J. W. Howell 302, C. Hotchkiss 313, 342, T. G. F. Harvey 331, C. B. Heston 355, N. T. Horton 356, J. F. Henderson 351, W. M. Hoge 374, J. H. Hasbrouck 383, J. W. Henderson 418.

**I.**—G. Ilisch 159, 238, I. Ingmundson 161, 204.

**J.**—R. Jones 15, M. Johnson 53, Justitia 99, Dr. C. M. Joslin 100, G. W. Jenkins 121, 157, J. E. Jones 125, J. Joslin 139, J. W. Johnson 300, E. M. Johnson 300, J. A. Johnson 301.

**K.**—W. H. Kirk 15, 239, W. M. Kellogg 34, 53, 122, 123, 233, A. C. Kerman 32, W. Kitson 126, D. Keplar 126, C. Keller 135, J. E. Kearns 157, J. J. Kiser 161, R. F. Kedzie 172, W. F. Kellogg 176, J. H. Kelley 189, Keyer & Finn 230, F. Krueger 267, 275, H. G. King 302, E. B. Kendall 312, J. H. Kennedy 410.

**L.**—B. Lunderer 28, 229, W. W. Lynch 30, Dr. F. Lashier 47, G. J. Longfellow 126, Lover of Italians 130, M. E. Loehr 155, H. W. Lee 160, Cyula Linswik 170, L. M. Land 205, D. P. Lane 205, F. Ludwig 229, L. Linsley 240, J. F. Lynn 241, L. M. Lindley 242, 336, W. O. Langdon 272, S. M. Locke 309, 348, 385, T. D. Leonard 335, C. H. Lettgens 418, C. A. Luce 421, H. L. Lankton, 422, S. S. Lyday 422.

**M.**—C. F. Muth 13, 59, 88, 124, 196, 240, 258, 275, M. Mahin 15, 17, 99, 163, 165, 204, 337, P. Miller 15, 30, 50, R. H. Murphy 16, 154, 185, 188, 202, 240, 301, 419, J. W. McNeil 21, 125, 159, 163, F. M. Moody 48, C. Miller 53, W. M. 53, W. K. Marshall 53, J. P. Moore 60, 418, R. Mayerhoffer 69, M. 88, 176, J. F. Montgomery 90, G. H. Mackay 100, W. Moorhouse 123, J. Murry 124, J. H. Martin 125, 204, 275, 309, 343, E. G. Martin 126, A. H. Mason 126, 419, S. K. Marsh 128, 357, J. M. Marvin 129, O. E. Mead 157, T. C. Metcalf 167, 308, C. R. Menz 189, R. Miller 190, 236, T. C. Millett 198, A. J. Mackay 204, J. I. Martin 205, W. McCartney 206, D. S. McCallum 206, R. Montgomery 206, J. C. Moon 224, S. Marshall 241, W. L. Moores 261, A. F. Moon 262, 316, G. F. Merriam 265, 276, C. McDermot 300, W. H. Mendow 333, T. Moran 345, C. McCracken 355, M. Metcalf 381, J. N. McColm 413, P. McDonnell 418, T. M. Moore 419, W. Martin 422.

**N.**—Novice 14, 236, 294, J. H. Nellis 69, 103, 132, 275, 300, A. Neighbour 85, D. P. Niven 161, 204, Miss L. J. Noble 204, M. A. Newcomb 301, A. Novice 416.

**O.**—D. H. Ogden 62, J. Oatman & Co. 100, 273, 275, Mrs. M. A. O'Neill 100, One who knows 131, A. Osborn 255, R. B. Oldt 238, 312, J. W. Osborn 277.

**P.**—O. O. Poppleton 14, 100, E. Pickup 15, 30, 351, D. D. Palmer 17, 51, 63, 87, 134, 409, M. L. P. 28, J. F. Pelham 47, 84, W. T. Parham 52, E. P. 83, J. M. Porter 101, J. E. Pleasants 101, E. C. Phillips 121, 278, W. Porter 123, 227, J. Patterson 162, F. Perry 189, 302, L. P. Plummer 276, N. Perkins 301, Dr. E. Parmlly 351, 380, J. P. Parker 422.

**Q.**—Quiz 189, 315.

**R.**—J. E. Ritchie 23, 27, 414, W. H. Rafferty 48, J. Rooker 54, 314, W. B. Rush 124, 131, 133, 257, 277, 423, H. W. Roop 125, 276, H. B. Rolfe 129, 157, A. I. Root 156, 222, H. W. Roop 162, 418, L. M. Roberts 195, 206, A. Reader 235, W. Muth-Rassmussen 242, A. J. Richardson 261, J. L. Richardson 302, L. C. Root 402, 420, E. Root 413, 419, A. M. Rhodes 420.

**S.**—J. M. Stephenson 14, W. Stump 52, 101, A. Salisbury 59, 304, 254, C. Sonne 65, F. Searies 126, 241, C. W. Stokes 126, J. O. Shearman 129, Scott & Bramblett 156, O. P. Storm 158, Anna Saunders 159, 206, 278, 298, I. Sharp 159, 241, 335, A. Simons 162, H. S. See 162, F. Schletzbaum 162, J. L. Smith 206, L. Suthill 208, 311, J. Stoddard 221, 300, A. W. Smith 230, W. T. Sears 231, Subscriber 242, 278, 315, 422, F. M. Stockton 261, A. J. Simonds 277, G. W. Stanley 301, W. S. Stocum 342, Southard & Ranney 348, J. W. Shearer 379, S. W. Stevens 419, G. C. Soden 420, W. H. Sedgwick 421.

**T.**—A. Tefft 48, Mrs. E. Truman 51, H. N. Tennant 107, E. J. Thomrs 121, J. Tomlinson 123, 192, S. P. T. 123, G. Thompson 127, M. D. T. 158, L. L. Triem 162, H. Templeton 189, J. H. Townley 256, G. H. Teague 329, F. B. Thurber 378.

**V.**—D. Videto 52, J. V. 83, S. L. Vall 123, G. A. VanHorn 123, C. C. VanDeusen 240, P. L. Vialhon 355.

**W.**—C. Weeks 15, R. Wilkin 16, 52, 156, 190, S. G. Wick 21, 96, E. Wellington 53, 130, A. P. Wyman 48, J. A. Waterhouse 61, 275, G. H. Wright 129, P. Wilde 124, W. G. Walton 121, 128, 153, A. Wright 125, W. F. Williams 141, N. D. West 160, D. Wurth 162, W. H. Ware 187, A. T. Wright 204, J. Winfield 205, H. F. Walton 206, J. H. Washburn 240, G. E. Wallace 240, J. Wemmer 242, A. W. Windhorst 275, H. C. White 336, J. C. Williamson 336, M. Wright 340, W. Williamson 415.

**Y.**—B. P. Yeomans 240.

**Z.**—G. W. Zimmerman 275.

SF 521

A5

v.13-14

## INDEX TO CORRESPONDENTS.

—:O:—

**A.**—W. J. Andrews 22, 49, 88, 163, 187, 224, 225, 260, 267, 310, 333, 338, 407, H. Alley 51, 64, 87, 119, 201, 238, 266, 271, 304, 305, 308, 349, 415, 421, J. Anderson 51, R. M. Argo 65, 199, 272, 307, 343, N. P. Allen 69, 88, 195, 209, 410, J. L. Anderson, 126, 276, 336, H. J. Alvis 160, A. C. Attwood 235, R. Arnold 261, J. Atkinson 276, L. C. Axte11 335, R. M. Anderson 335, W. H. Andrews 341, A. Beginner 418, M. Adams 419.

**B.**—H. Bird 15, R. S. Beckett 30, S. S. Butler 30, 51, H. A. Burch 31, 56, 95, 120, 185, 276, 340, J. M. Bennett 48, M. M. Baldrige 49, 121, 130, Dr. J. P. H. Brown 50, 136, J. W. Bittenbender 51, W. S. Boyd, 54, F. Benton 57, 133, 140, 177, 225, 277, 238, 405, T. F. Bingham 62, 85, 123, 206, 220, 235, W. S. Barclay 91, J. Billings 88, W. Bence 102, Barker & Dicer 122, R. Bacon 135, 301, O. Brumfield 156, O. M. Brown 156, Jos Brown 158, 161, J. Barfoot 159, C. S. B. 161, Mrs. A. Brackett 161, L. C. Bormanman 162, W. J. Beal 173, A. Benedict 190, 239, Mrs. L. B. Baker 194, Mrs. M. A. Bills 197, P. Bossert 204, D. Bartgis 207, J. M. Brooks 219, 259, J. Best 230, W. G. Bailey 240, R. E. Bush 278, J. D. Bedell 297, O. F. Bledsoe 303, H. L. Brush 351, N. N. Betsinger 382, Dr. Botts 411, E. E. Billings 414, W. B. Burgett 419, A. A. Baldwin 420, E. B. Barker 422, H. B. 422.

**C.**—W. F. Clark 11, 13, 46, W. Christ 16, A. Chapman 16, A. J. Cook 18, 67, 92, 96, 101, 165, 189, 221, 278, 300, 315, 371, N. Cameron 20, 163, 240, J. J. Caldwell 28, 246, W. H. Conklin 47, R. C. Cameron 47, D. Clifton 51, J. T. Connelley 32, 126, C. R. Clough 53, 242, J. M. Camp 53, J. S. Coe 57, 101, 158, 310, P. P. Collier 67, 68, 101, 322, 347, O. Clute 97, 227, 304, M. M. Callen 102, J. H. Christie 121, F. P. Clark 123, R. L. Curry 125, F. W. Chapman 155, 201, S. Cornell 155, Crowfoot Bros. 159, E. Culver 162, W. Cam 162, 241, 314, A. B. Cheney 165, 173, 324, C. E. Clark 202, O. E. Clark 207, F. Claussen 240, John Crowfoot 276, J. Z. Carr 278, W. E. Connett 301, A. U. Crosby 315, G. W. Church 333, R. A. Calvin 350, O. Courtney 350, E. Cori 406, I. M. Camp 420.

**D.**—G. M. Doelittle 14, 347, 364, 370, 417, 422, J. L. Davis 14, 63, 64, F. R. Davis 15, M. D. DuBois 16, Dr. Dzierzon 23, 223, C. Dadant 24, 25, 27, 84, 96, 106, 157, 164, 206, 231, 233, 269, 305, 308, 350, 409, P. Dunken 51, 207, J. Divekey 52, Mrs. J. W. Dick 53, L. J. Diehl 120, 134, J. Davis 134, R. Dart 159, J. W. Dodson 159, S. C. Dodge 178, 333, 375, 408, D. M. D. 242, A. J. Davidson 288, W. Dyer 275, 277, Mrs. J. S. Dunham 301, J. A. Dirwanger 301, W. J. Davis 332, M. Deunler 314, Mrs. M. Dunbar 334, N. B. DeVol 336, J. B. Dines 422.

**E.**—J. Emmons 51, 162, 204, 240, J. Edmonds 101, W. P. Evritt 102, 135, 161, 421, P. H. Elwood 160, H. D. Edwards 265, 351, E. S. Edwards 240.

**F.**—C. Follett 48, R. Forsyth 51, J. B. Ficklen 52, J. F. Flory 52, 156, 275, 301, B. Franklin 102, 209, C. J. Fox 157, 264, S. S. Fetherolf 335, J. Fox 416.

**G.**—C. Grimm 19, 418, W. H. Garhan 51, F. M. Glasgow 53, 422, J. W. Guthrie 53, C. F. Greening 13, 240, 278, 300, J. G. 83, J. W. Greene 100, 240, 267, G. L. Gast 100, A. P. Green 123, LeRoy Gates 123, R. P. G. 158, D. Grabble 162, J. M. Good 189, C. Griebeling 205, C. E. Gaylord 207, J. R. Gossage 221, J. M. Gills 241, J. E. Greene 242, W. H. Green 261, C. A. Ging 279, J. L. Grey 279, K. Grayson 286, C. J. H. Gravenhorst 300, 336, 348, M. G. Grigsby 315, C. A. Graves 355, J. M. Glenn 341, P. H. Gibbs 413, J. T. Gray 420.

**H.**—J. E. Hetherington 14, 377, J. Huestis 14, O. Halbleib 15, 52, 420, A. J. Haney 16, J. Hazen 17, J. Heddon 26, 54, 94, 140, 194, 199, 232, 288, 305, 358, 417, S. Humfield 47, 162, Mrs. W. Harris 51, J. Harmon 53, 157, 300, H. Hamilton 68, 345, D. E. Haynie 83, 301, J. P. Howard 84, J. F. Hershey 100, H. S. Harrison 100, 101, C. M. Halbleib 101, H. G. Hendricks 102, A. H. Hart 120, 206, H. Haines 122, 162, 176, 196, 202, 208, 271, 274, 304, 313, 314, 419, E. Hershey 126, N. H. Holman 126, 301, D. P. Hartford 155, W. P. Hogarty 156, H. S. Henth 160, J. Harper 162, W. W. Hippolite 162, 207, L. Hitchcock 165, W. P. Henderson 197, 230, 243, J. E. Hunter 204, J. W. Howell 205, E. J. Hill 205, A. S. Haskin 206, Mrs. D. M. Hall 208, H. H. Howard 220, J. T. Hobbs 234, J. H. Hodgkins 240, H. 276, J. M. Hicks 277, H. Harnard 279, G. T. Horning 302, J. W. Howell 302, C. Hotchkiss 313, 342, T. G. F. Harvey 331, C. B. Heston 355, N. T. Horton 356, J. F. Henderson 351, W. M. Hoge 374, J. H. Hasbrouck 383, J. W. Henderson 418.

**I.**—G. Ilisch 159, 238, I. Ingmundson 161, 204.

**J.**—R. Jones 15, M. Johnson 53, Justitia 99, Dr. C. M. Joslin 100, G. W. Jenkins 121, 157, J. H. Jones 157, J. Joslin 139, J. W. Johnson 300, E. M. Johnson 300, J. A. Johnson 301.

**K.**—W. H. Kirk 15, 239, W. M. Kellogg 34, 53, 122, 123, 233, A. C. Kerman 32, W. Kitson 126, D. Keplar 126, C. Keller 135, J. E. Kearns 157, J. J. Kiser 161, R. F. Kedzie 172, W. F. Kellogg 176, J. H. Kelley 189, Keyer & Finn 200, F. Krueger 267, 275, H. G. King 302, E. B. Kendall 312, J. H. Kennedy 410.

**L.**—B. Lunderer 28, 229, W. W. Lynch 30, Dr. F. Lashier 47, G. J. Longfellow 126, Lover of Italians 130, M. E. Loehr 155, H. W. Lee 160, Cyula Linswik 170, L. M. Land 205, D. P. Lane 205, F. Ludwig 229, L. Linsley 240, J. F. Lynn 241, L. M. Lindley 242, 336, W. O. Langdon 272, S. M. Locke 309, 348, 385, T. D. Leonard 335, C. H. Lettgens 418, C. A. Luce 421, H. L. Lankton, 422, S. S. Lyday 422.

**M.**—C. F. Muth 13, 59, 88, 124, 196, 240, 258, 275, M. Mahin 15, 17, 99, 163, 165, 204, 337, P. Miller 15, 30, 50, R. H. Murphy 16, 154, 185, 188, 202, 240, 301, 419, J. W. McNeil 21, 125, 159, 163, F. M. Moody 48, C. Miller 53, W. M. 53, W. K. Marshall 53, J. P. Moore 60, 418, R. Mayerhoffer 69, M. 88, 176, J. F. Montgomery 90, G. H. Mackay 100, W. Moorhouse 123, J. Murry 124, J. H. Martin 125, 204, 275, 309, 343, E. G. Martin 126, A. H. Mason 126, 419, S. K. Marsh 128, 357, J. M. Marvin 129, O. E. Mead 157, T. C. Metcalf 167, 308, C. R. Menz 189, R. Miller 190, 236, T. C. Millett 198, A. J. Mackay 204, J. I. Martin 205, W. McCartney 206, D. S. McCallum 206, R. Montgomery 206, J. C. Moon 224, S. Marshall 241, W. L. Moores 261, A. F. Moon 262, 316, G. F. Merriam 265, 276, C. McDermot 300, W. H. Mendow 333, T. Moran 345, C. McCracken 355, M. Metcalf 381, J. N. McColm 413, P. McDonnell 418, T. M. Moore 419, W. Martin 422.

**N.**—Novice 14, 236, 294, J. H. Nellis 69, 103, 132, 275, 300, A. Neighbour 85, D. P. Niven 161, 204, Miss L. J. Noble 204, M. A. Newcomb 301, A. Novice 416.

**O.**—D. H. Ogden 62, J. Oatman & Co. 100, 273, 275, Mrs. M. A. O'Neill 100, One who knows 131, A. Osborn 255, R. B. Oldt 238, 312, J. W. Osborn 277.

**P.**—O. O. Poppleton 14, 100, E. Pickup 15, 30, 351, D. D. Palmer 17, 51, 63, 87, 134, 409, M. L. P. 28, J. F. Pelham 47, 84, W. T. Parham 52, E. P. 83, J. M. Porter 101, J. E. Pleasants 101, E. C. Phillips 121, 278, W. Porter 123, 227, J. Patterson 162, F. Perry 189, 302, L. P. Plummer 276, N. Perkins 301, Dr. E. Parmlly 351, 380, J. P. Parker 422.

**Q.**—Quiz 189, 315.

**R.**—J. E. Ritchie 23, 27, 414, W. H. Rafferty 48, J. Rooker 54, 314, W. B. Rush 124, 131, 133, 237, 271, 423, H. W. Roop 125, 276, H. B. Rolfe 129, 157, A. I. Root 156, 222, H. W. Roop 162, 418, L. M. Roberts 195, 206, A. Reader 235, W. Muth-Rassmussen 242, A. J. Richardson 261, J. L. Richardson 302, L. C. Root 402, 420, E. Root 413, 419, A. M. Rhodes 420.

**S.**—J. M. Stephenson 14, W. Stump 52, 101, A. Salisbury 59, 304, 254, C. Sonne 65, F. Searies 126, 241, C. W. Stokes 126, J. O. Shearman 129, Scott & Bramblett 156, O. P. Storm 158, Anna Saunders 159, 206, 273, 298, I. Sharp 159, 241, 335, A. Simons 162, H. S. See 162, F. Schletzbaum 162, J. L. Smith 206, L. Suthill 208, 311, J. Stoddard 221, 300, A. W. Smith 230, W. T. Sears 231, Subscriber 242, 278, 315, 422, F. M. Stockton 261, A. J. Simonds 277, G. W. Stanley 301, W. S. Stocum 342, Southard & Ranney 348, J. W. Shearer 379, S. W. Stevens 419, G. C. Soden 420, W. H. Sedgwick 421.

**T.**—A. Tefft 48, Mrs. E. Truman 51, H. N. Tennant 107, E. J. Thomrs 121, J. Tomlinson 123, 192, S. P. T. 123, G. Thompson 127, M. D. T. 158, L. L. Triem 162, H. Templeton 189, J. H. Townley 256, G. H. Teague 329, F. B. Thurber 378.

**V.**—D. Videto 52, J. V. 83, S. L. Vall 123, G. A. VanHorn 123, C. C. VanDeusen 240, P. L. Vialhon 355.

**W.**—C. Weeks 15, R. Wilkin 16, 52, 156, 190, S. G. Wick 21, 96, E. Wellington 55, 130, A. P. Wyman 48, J. A. Waterhouse 61, 275, G. H. Wright 129, P. Wilde 124, W. G. Walton 121, 128, 153, A. Wright 125, W. F. Williams 141, N. D. West 160, D. Wurth 162, W. H. Ware 187, A. T. Wright 204, J. Winfield 205, H. F. Walton 206, J. H. Washburn 240, G. E. Wallace 240, J. Wemmer 242, A. W. Windhorst 275, H. C. White 336, J. C. Williamson 336, M. Wright 340, W. Williamson 415.

**Y.**—B. P. Yeomans 240.

**Z.**—G. W. Zimmerman 275.

•0•

A about Honey	61
A Cheap Bee House	243
A few more Straws	232, 268,
Agricultural College Apiary	18
Agricultural Progress	18
Am. Institute and the National	61
Am. Institute of Beekeepers	16
An Easy cure of Poul Brood	92
A New Hiving Apparatus	238
An Injustice	123
A Novel Experiment	114
Answer to J. C. Newman	65
Answer to Mr. Dudant	274,
Apiarian or Apiarist?	30,
A Prolific Queen	312
A Woman's Experience	194
Bee-Culture and Stings	267
Bee-Culture in the South	135
Bee Hives	135,
Bee Hunt in Florida	413
Bee-Keeping as a Pursuit	62
Bee Lice	19
Bee Notes from Iowa	34
Bee Notes from Kentucky	30,
Bee Smoker—H. Nesbit	123
Bees and Red Clover	314
Bees at Agricultural College	67
Bees of the same Colony fighting	98, 124, 200,
Bees of various Hives	357
Billings of the Honey Bee	173
Bingham Hives	123
Bingham Smoker	221,
Black vs. Italian Bees 30, 129, 235,	272,
300	300
Blasted Hopes	14
Bee Notes from Kansas	30
Building Straight Combs	23
California Honey Crop	26
California Honey Interests	26
Care of Bees in Winter	20
Centennial Award—Extractors	213
Charging a Queen in queen cells	40
Champion Queens	23
Cheap Queens	238
Chickens Eating Bees	19
Chips from Sweet Home, 17, 133,	140
City Bee-Keeping (Illustrated)	5
Coc's House Apiary	150
Corn Blossom Queens 30, 30, 65, 130,	130
303, 304, 309, 371,	413
Comb Guides	65,
Constitution of National Society	9
Corn Blossoms and Honey	16
Cyprian and Carniolian Bees	51
Cyprian Bees	51
Desirable Combs—How Secured	19
Discussion in Germany	22
Does Bee-Culture pay?	8
Dollar Queens	197, 231, 265,
Dollar Queens vs. Imported	300
Doolittle's Report	413
Dysentery	13
Explanation from Benedet	238
Facts for the Public	27
Falsification of Honey	355
Feeding Bees, and Feeders	34
Foreign Races of Bees	384
Foul Brood	19
Future of the National Society	9
Hardin Haines Ventilated	23
Hives in Rows	6
Honesty the best Policy	9
Honey a Luxury	14
Honey and Pollen Resources	12
Honey as an Article of Food	19
Honey Dealers	37
Honey Hives	27
Honey in Frames	27
Honey Market, Crop & Prices	30
How I winter my Bees	5
How may we Improve Bees?	3
How to Destroy Moth-Millers	20
How to Keep up Hives	2
How to Fasten Foundation	10
How to Italianize Blacks, &c	13
How to Prevent Increase	23
I Can	34
Important Points in Bee Hives	34
Imported Queens	34

Imported Queens and Breeders.....	340
Improvement of Italian Bees.....	127, 190
Inaugural Address.....	168
Introducing Queens.....	25, 87, 163,
235, 239, 300.....	385
Is Wax Wholesome?.....	69
Italian Bees.....	130, 190, 271
Joint in the Leg of a Bee.....	176
Larvæ of Queens and Purity of Drones.....	304
Letter from California.....	263
Letter from Kansas.....	20
Life Insurance.....	174
Longevity of Honey Bees.....	232
Lying out of Bees.....	6
Management of the Apiary.....	38
Marketing Honey.....	371, 416
Merits of Italians and Blacks.....	227
Michigan Association.....	199
Michigan State Fair.....	340
Mistakes of Bee-Keepers.....	32
Mode of Preparing for Winter.....	131
My Annual Report.....	26
My Bees.....	229
My Queen Cage.....	311
My Report and Management.....	350
National Beekeepers' Association.....	90, 91
Neatness in Bee-Keeping.....	34
Nil Desperandum.....	409
Northern Minn. Apiaries.....	16
Notes from the Editor.....	350
Notes from Louisiana.....	36
Notes from Tennessee.....	50
Odds and Ends.....	266
On Novice.....	403
Open Letter to Prof. Cook.....	417
Organization and sale of Honey.....	378
Our Honey Season.....	304
Our Interests.....	309
Our Michigan Convention.....	50
Our National Society.....	22
Over-Stocking.....	203
Pasturage.....	19
Patents.....	385
Plan for Getting comb Honey.....	341
Pleasure of Bee-Keeping.....	411
Points for Reporters.....	97
Portable Shade Covers.....	298
Preparing Brood for Winter.....	382
President Andrews' Address.....	339
President Bacon's Address.....	135
Prevention of After-Swarming.....	370
Prevention of Increase.....	54
Price of Queens and Colonies.....	164, 322
Progress in Bee-Culture.....	60
Queens laying in queen cells.....	267, 273
Queries.....	23
Read This.....	304
Rearing Italian Queens.....	305, 214, 381
Recipe for Bite of Mad Dogs.....	190
Renewing Combs.....	248
Report from G. M. Doolittle.....	347
Scraps from Illinois.....	233
Sending Bees by Mail.....	238, 308
Shall Farmers keep Bees?.....	172
Shall Women keep Bees?.....	170, 197
Shipping Bees.....	413
The Deborah Hive.....	268, 303
Strange Things in Bee-dom.....	54
Surplus Honey.....	28, 58, 63
The Barnes Foot-Power Saw.....	203
The Bee's Physiology.....	177
The Candying of Honey.....	54
The Composition of Honey.....	172
The Deborah Hive.....	190
The Express Companies.....	309
The Honey Market.....	376
The Kalamazoo Convention.....	66
The Michigan B. K. Association.....	65
The National Convention.....	310
The Purity of the Italian Bee.....	136
The Queen.....	201
The Science of Bee-Keeping.....	68
Thoughts on Bee-Keeping.....	413
Thoughts on Insurance.....	87
Two Queens in same Hive.....	267, 271
Union Apiary.....	21, 96
Un-scientific Bee Culture.....	96

Various Matters .....	55
Ventilation .....	26
Visit to a Canadian Bee-keeper ..	26
Visit to an Illinois Bee-Keeper ..	313
Visit to a Neighbor's Apiary ....	28
Weather Report in Louisiana ..	
Which Frames to Adopt .....	131
Which is It? .....	37
Whitman's Fountain Pump .....	300
Wintering Bees .....	165, 222, 224,
Wintering Nucleus Colonies .....	242
Wintering on Honey Dew .....	302
Wintering on Summer Stands ..	236
Winter Transferring .....	128

Additions to our Museum, 13, 130, 188, 221, 257, 260	401
American Institute Fair	365
A New Discovery	187
Barnes Foot-Power Saw	156
Bee Stings	402
Beeswax—A Staple Article	330
Bee Items from Louisiana	46
Bibulous Bees	402
Bull's <i>Ne Plus Ultra</i> Hive	84
California Honey	219
Chinese Mustard a Honey Plant	1
Clean out the Hives	1
Comb Foundation Machines	96
Comb Honey Carriers	350
Deserved Tribute	364
Editorial Items, 13, 46, 49, 50, 83, 86, 119, 122, 155, 158, 185, 188, 219, 221, 257, 260, 283, 294, 323, 332, 363, 386, 401, 402	404
Eggs laid in Queen Cells	220
Farm Prosperity	33
Future of the National Society	13
Harvest Musings	331
Hints to Beginners	119, 332
Honey-Producers' Interests	44
Honey Product of Southern California	222
House Appliances	283
How to go to the Convention	332
Is it Pure?	219
Mad Dogs	119
Moon's <i>Bee World</i>	317
Muth's Extractor	258, 265
My Plan for Registering	250
New York Honey House	260
October Management	332
Prizes for Essays	402
Quinby's Clamps	121
Railroad Strike and Riot	258
Rates of Postage	219, 250
Registering States	219, 250
Removal of Office	386
Royal Bee Funeral	331, 403
Seasonable Hints	224
Sectional Honey Boxes	123
Sending Bees by Mail	186, 187
Separating Honey from Wax	280
Something New	187
Stingless Bee Extractor	219
Surplus Frames	136
Sweet Clover	368
Tennant's Honey Box	107
The Festive Hopper	180
The Fin Hive	188
The First Carved Honey Knife	188
The Honey Market	296
The National Convention	294, 402
The Season of 1876-7	45
The War in Europe	188
Thurber Gold Medal	180
To our Southern Subscribers	180
Tremontani Queens	331
What shall the Harvest be?	250
What shall we do with Honey?	188, 201
White's Extractor	11
Wisdom of the Past	11
Write Plainly	11

## FOREIGN NOTES:

A Centenarian in Alsace .....	298
An Interesting Letter from Germany .....	314
Apiculture at the Paris Exposition .....	299
Apis Dorsata (the large Bee) of Java .....	406
Arabis Alpina (a new Honey Plant) .....	405
Bee Convention in Bohemia, Austria .....	298
Bee-Culture in Northern Russia .....	298
Brazilian Honey Plant—An Evergreen .....	299
Chilled Bees—How saved from Death .....	405
Cure for Foul Brood—Salicylic Acid .....	299
Distribution of the Honey Bee .....	277
Does taking Honey Injure Plants? .....	225
Dzierzon Queens and Cyprian Bees .....	347
Forming New Colonies in France .....	177
Foul Brood—Its Cause .....	277
From "Nostra Bella Italia" .....	277
General Points for Beginners .....	177
Honey-Thief Moth in Germany .....	405
How to clear Dead Bees from the Combs ..	177
How to Counteract Production of Drones ..	226
How to Prove the Adulteration of Honey ..	225
Increasing Colonies in Hanover .....	226
Introduction of Foreign Races of Bees .....	299
Salicylic Acid as a Cure for Foul Brood ..	140
Scientific Farmers and Bee-Keepers .....	277
The American Bee Journal in Europe .....	277
The Cyprian Bee (C. J. H. Gravenhorst) ..	299
The Cyprian Bee in Germany .....	225
The different Races of Bees .....	140
The Honey Harvest in Alsace .....	405
The Honey Season in Europe .....	298
The Importation of Javanese Bees .....	277
The late Adam Grimm's Theory .....	299
The Simplest Remedy for Stings .....	225
The Tulp Tree in Germany .....	299
The use of Robber Bees .....	226
Wintering in Pits and Cellars in Bohemia ..	406

## GLEANINGS FROM EXCHANGES:

Abbott's School of Apiculture in England ..	14
How to Prepare Colonies with Chaff .....	14
The Centennial Honey Show .....	14
White Comb Foundation—How to Get it? ..	14

## NOTES AND QUERIES:

A Cure for Bee Dysentery .....	84
Alsike Clover as Forage for Bees .....	180
A Young Queen Leaving the Hive .....	48
Bees of the same Colony Fighting .....	47
Buckwheat for a Late Crop of Honey .....	279
Centennial Award on Honey Extractors ..	158
Cockroaches Investing Hives .....	121
Comb Foundation—Is it Thinned by Bees ..	278
Extracting Uncapped Honey .....	180
Fall Pasturage for Bees in Illinois .....	48
Foul Brood and its Cure .....	48
Good Cure for Bee Stings .....	180
Honey Boxes vs. Sectional Frames .....	157
Honey Plants .....	83, 315, 351, 422, 423
How to Italianize Hybrid Bees .....	279
How to Prevent After-Swarming .....	180
How to Prevent Honey Souring .....	157, 422
How to Prevent "In-and-In Breeding" .....	157
How to Secure Straight Combs .....	47
How to Transfer Bees from Box Hives .....	158
Introducing Italian Queens .....	83
Is Maple-Sugar Water good for Bees? .....	157
Is the American Hive still Patented? .....	421
Keep Colonies Strong in Order to Succeed ..	315
Langstroth Hive (none better) .....	47
Langstroth Hives—their correct measure ..	157
Melilot Clover as a Honey Plant .....	279
Melilot Clover—its Description .....	121
Mignonnette as a Bee Pasture .....	220

Patent Hive Vendors and Robbers .....	48
Proper Width apart for Combs .....	47
Queenless Colony—How to Remedy it ....	158
Quinby Hive—Foul Brood—Moths .....	278
Reasons for Loss in Wintering Bees? .....	157
Renewing Combs in the Brood Chamber .....	315
Rust on Extractors—How Avoided .....	278
Small Comb Foundation Machines .....	220
Sugar for Feeding in the Spring .....	121
The Best cure for Foul Brood .....	180, 315
The Best Plant—Cheapest Pasture .....	279
The best way to Preserve empty Combs .....	180, 315
The Doolittle Honey Box and Crate .....	421
The JOURNAL duly Appreciated .....	47
The Quinby Clamp for Hives .....	121
The Quinby Smoker—King's make .....	158
Tulip and Basswood—How Cultivated ....	278
Upward Ventilation—Is it Necessary? ....	189
Van Deusen's Feeder—a Description .....	221
Why do Bees go West when Swarming? ..	121
Why do Bees sometimes Refuse to Swarm ..	278
Why Queens put Several Eggs in one Cell ..	315
Willows and Maples as Honey Plants .....	189
Wintering on the Cellar Bottom .....	48

## OUR LETTER BOX:

Sundry Letters, 14, 51, 100, 123, 150, 204, 240, .....	275, 300, 335, 418
--	--------------------

## PROCEEDINGS OF CONVENTIONS:

California Association .....	137, 242, 264
Central Kentucky Association .....	415
Jefferson County, Indiana, Association ....	230
Maury County, Tennessee, Association .....	88
Michigan Association .....	31, 196
National Association .....	369
New York City Association .....	341
North Eastern Association .....	103, 132
Northern Missouri Association .....	67, 344
Southern Kentucky Association .....	410
Western Illinois Association .....	176, 196

## SOUTHERN NOTES:

A New Use for Honey in Making Wine ....	334
Bee-Culture in the Southern States .....	333
Bee Items gleaned on our Trip .....	407
Bees in Northern Georgia .....	262
Best Hive for all Purposes .....	333
Comb Honey—Building a Honey House .....	298
Covering for Frames .....	225
Drones with Heads red as a Cherry .....	333
Explanatory—Our Southern Department, ..	224
Honey-Dew in the Southern States, .....	224
How to Raise Queens .....	261
Look-Out Apiary—Comb Foundation .....	407
Mr. A. F. Moon's Apiary in Georgia .....	333
N. N. H. (Novice—National—Heddon) .....	333
One Hundred Hives in a Cyclone .....	261
Our Honey—not from the White Clover .....	225
Our Visiting Jaunt to Louisiana .....	297
Price of Bees in Tennessee .....	333
Purely Mated Queens .....	333
Queen Destroying Workers .....	261
Sending Bees by Mail .....	224
The Honey Season .....	261
The Hive I Prefer—the Langstroth .....	261
To our Friends about Mating Bees .....	261
Wayside Penellings en route to New York ..	407
Weight of a Colony of Bees in June .....	297
Will it Pay to raise Dollar Queens? .....	334



